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Indonesia's export growth decomposition in ASEAN and ASEAN dialogue partners

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Article Info

Abstract

Purpose — This paper evaluates Indonesia's trade integration efforts and their impact on export competitiveness from 1989 to 2021. It examines the evolution of trade arrangements, starting with the ASEAN Preferential Trade Arrangement (APTA) and progressing to bilateral agreements.

Methods — Based on Leamer and Stern, the Constant Market Share Analysis (CMSA) measures Indonesia's export competitiveness over the study period.

Findings — The results indicate no significant improvement in competitiveness during the analysis period, with export growth primarily driven by the effect of world growth. Although competitiveness did not shift markedly over time, it remained positive overall, suggesting a buffer effect during economic crises.

Implications — The paper suggests that Indonesia should pursue deeper trade integration and unilateral economic reforms. Drawing on Korea's experience, combining export promotion policies with trade agreements could enhance market access and foster internal competitiveness.

Originality — This study provides long-term insights into Indonesia's export competitiveness amidst global trade integration efforts and offers policy recommendations based on the success of Korea's trade reforms.

Keywords — Constant Market Share Analysis, Free Trade Agreement, Competitiveness, Decomposition, Trade Integration.

Introduction

Many economists assert that Indonesia has been identified as entering a middle-income trap (Basri et al., 2016; Aswicahyono & Hill, 2016). Trade is one of the essential elements of the economy that endorses economic growth (Samuelson & Nordhaus, 2009). Economic transformation is necessary to escape the middle-income trap (Basri et al., 2016). Trade is also one of the essential parts that should enter into a comprehensive strategic economic transformation policy (Pangestu et al., 2015). Despite the changing world challenges and conditions, Indonesia should be able to shift from commodity exporters to manufacturing-based product exporters (Pangestu et al., 2015). Based on Indonesia`s Trade Policy Review, some trade reforms have been conducted by Indonesia, including the entry into many regional trade arrangements with its trading partners (WTO, 2020).

Free Trade Agreements (FTA) are tools that endorse trade and market access (Krugman & Obstfeld, 2009). However, FTAs can be a tool to set and endorse domestic reform that may increase competitiveness. Indonesia has been integrating trade with its ASEAN and ASEAN Dialogue Partners (WTO, 2020). Indonesia has also been conducting bilateral free trade agreements with its trading partners, including Japan, Mozambique, the United Arab Emirates, Chile, and Australia (WTO, 2020). Indonesia is also pursuing FTA negotiations with the European Union, Eurasian Economic Union (EAEU), Peru, and MERCOSUR (Ministry of Trade Republic of Indonesia, 2022).

This paper is a descriptive analysis of the decomposition of Indonesia's export growth from 1989 to 2022. It attempts to relate the effort of economic transformation by conducting trade liberalization from 1989 to 2022 and developing competitiveness. This paper attempts to answer the question, "Does competitiveness become the main contributor to export growth in the ASEAN and ASEAN Dialogue Partners market?". Therefore, this paper attempts to provide whether Indonesia's export growth in the ASEAN and ASEAN Dialogue Partners' market has been driven by competitiveness.

The scope of this paper will only be limited to the analysis of export value based on SITC Rev 3 from Indonesia to the ASEAN and ASEAN Dialogue Partners' market. The observation is from 1989 to 2021. This paper will adopt constant share norms in the shift-share analysis using Leamer and Stern's Constant Market Share Analysis approach to decompose Indonesia's exports worldwide and to the ASEAN and ASEAN Dialog Market.

This paper consists of five sub-sections. First, it will highlight an introduction, including the background of the study, research question, research objectives, scope of research, and a brief description of the methodology adopted. Second, it will elaborate on the review of the development of the literature. Third, it will explain the constant market share approach. Fourth, it will provide the analytical results. This paper will summarize the discussion with a conclusion and policy recommendation.

Trade integration and competitiveness are intertwined (Galovic, 2021). While economist believes that export expansion relates to higher competitiveness of a country, the debate has continued since Adam Smith and David Ricardo whether free trade is crucial to determining welfare and a country's competitiveness (Krugman & Obstfeld, 2009). The increase in the arguments of comparative advantage from David Ricardo has changed the world's point of view on protectionism (Samuelson & Nordhaus, 2009).

However, lobbyists recognize that if trade is free, their goods will lose some profits created by protection. Hence, lobbyists will try to influence governments not to impose unilateral liberalization. There will be collective action to influence government policy to protect specific lobbyist group sectors at the expense of consumer loss. Consumers tend to be separated and unable to conduct collective actions to influence government policy, and protection remains in place. It is tough to conduct unilateral liberalization even when all governments recognize that free trade will bring better welfare and economic competitiveness (Krugman & Obstfeld, 2009).

The economist believes multilateralism will be a suitable venue for liberalization. However, reaching an agreement under a multilateral trading system is complex (Hoekman et al., 2002). The failure to decide ministers of trade at the Ministerial Conference in Cancun has diminished the hope and created distrust among countries to encourage further liberalization through multilateral fora. Baldwin (2006) asserts that the significant impact of MC 5 in Cancun is the proliferation of regional trade agreements among WTO members. Many researchers started to question the institutional arrangement of WTO, create distrust among countries, and experience "complex multilateralism which constitutes "heterogeneity, multipolarity, and potentially conflictual" (Narlikar & Wilkinson, 2004; Abbas & Duchesne, 2023).

Regional trade arrangements may have some cost to the economy. Trade will divert from an efficient country not a party to the agreement to a country with less efficient production, which becomes a party to the trade agreement. This is called trade diversion (Balassa, 1976). Some economists argue that regionalism may have become a stepping stone toward multilateralism (Mistry, 1995; Fiorentino et al., 2007). WTO allows the process of breaching the Most Favoured

Nation (MFN) principles under the framework of regional trade agreements as long as it is more liberal than what has been achieved under a multilateral process (Leal-Arcas, 2011). Multilateralism and regionalism could address this issue (Fiorentino et al., 2007).

Despite all the debate about multilateralism versus regionalism, free trade is becoming strongly believed to be a vehicle to enhance competitiveness and welfare. The growing global value chain trend has augmented a country's importance in regional trade agreements (Rahman et al., 2024; Suryanta, 2021). Regional trade agreements should be able to facilitate and increase domestic reform that facilitates the global value chain. RCEP will facilitate the backward linkage of GVC among RCEP countries (Rahman et al., 2024).

The debate continues into a deep agreement (Kim, 2015; Mattoo et al., 2020). There is a growing demand for trade agreements to solve more complex world problems and challenges such as environmental, labor, gender, etc. (Mattoo et al., 2020). At the same time, some economists believe that trade agreements could be a political signal for its partners to endorse friend-shoring (Reiterer & Houng, 2023; Blanga-Gubbay & Rubinuva, 2023). Trade agreements can signify that two countries are allies (Blanga-Gubbay & Rubinuva, 2023). Exploration of trade integration and competitiveness has been conducted by various researchers (Petrović et al., 2008; Stojanovic et al., 2013). However, empirical studies, among others, have been conducted by many scholars in Indonesia (Aswicahyono & Rafitrandi, 2018; Rahmadi & Ichihashi, 2012; Widodo, 2010). Widodo (2010) and Rahmadi and Ichihashi (2012) attempted to see Indonesia's exports and ASEAN exports decomposition.

Methods

Data

Trade data is secondary data obtained from WITS UNCTAD from 1989 to 2021. The data is described under SITC Revision 3. Based on the work of Lall (2000), we could translate SITC Revision 3 into a technological category of primary, resource-based, low-technology, medium-technology, and high-technology products.

Constant Market Share Analysis

According to the Armington demand approach, the quantity demanded is a function of the relative price of goods and services.

$$\frac{q_1}{q_2} = f\left(\frac{p_1}{p_2}\right) \tag{1}$$

where q and p are the quantity demanded and the price of exports. Subscripts 1 and 2 will denote country one and country 2. Equation 1 is a relationship that ascribes elasticity of substitution. This is becoming a substantial critique of Richardson (1971) that it will only happen whenever the Armington elasticity is unity or 1 (Fagerberg & Sollie, 1987; Balassa, 1977). However, Widodo (2010) asserts that the usefulness of this approach endorses many researchers adopting it.

By multiplying both sides with $\frac{p_1}{p_2}$ Then, we will have the following.

$$\frac{p_1 q_1}{p_2 q_2} = \frac{p_1}{p_2} x f\left(\frac{p_1}{p_2}\right) \tag{2}$$

We may recalibrate equation 2 into the following

$$\frac{p_1 q_1}{p_1 q_1 + p_2 q_2} = \frac{p_1}{p_2} x f\left(\frac{p_1}{p_2}\right) \tag{3}$$

This implies:

$$\frac{p_1 q_1}{p_1 q_1 + p_2 q_2} = \left[1 + \frac{p_2 q_2}{p_1 q_1}\right]^{-1}$$

$$\frac{p_1 q_1}{p_1 q_1 + p_2 q_2} = \left[1 + \left[\frac{p_1 f(\frac{p_1}{p_2})}{p_1}\right]^{-1}\right]^{-1}$$

$$\frac{p_1 q_1}{p_1 q_1 + p_2 q_2} = g\left[\frac{p_1}{p_2}\right] \tag{4}$$

This reflects that export share will be constant unless there is a change in the ratio of prices between the two countries. This creates the foundation of "constant share norms" to decompose the growth of exports (Leamer & Stern, 1970).

Leamer and Stern (1970) wrote about constant market share identity to decompose export growth the following:

$$X^{kw\prime} - X^{kw} = rX^{kw} + \sum_{i=1}^{n}(r_i - r)X_i^{kw} + \sum_i^n \sum_j^m (r_{il} - r_i)X_i^{kl} + \sum_i^n \sum_j^m (X_i^{kl\prime} - X_i^{kl} - r_{il}X_i^{kl}) \tag{5}$$

(WGE)   (CE)   (ME)   (COMPE)

$X^{kw}(X^{kw\prime})$: country's k export to world (w) period 0 (period 1)
$X_i^{kl}(X_i^{kl\prime})$: country's k export to country l for commodity i period 0 (period 1)
$X_i^{kw}(X_i^{kw\prime})$: Country's k export to world (w) for commodity i
R : Percentage growth in total world exports from period 0 to period 1
r_i : Percentage growth in total world export for commodity i from period 0 to period 1
r_{il} : Percentage growth in world export for commodity i to country i from period 0 to period 1

The term rX^{kw} in Equation 5 reveals the world growth effect (WGE), which implies that any change in actual export relates to world export.

The term $\sum_{i=1}^{n}(r_i - r)X_i^{kw}$ represent the commodity composition effect. The commodity composition Effect (CE) measures whether the growth of a commodity's world export is higher (lower) than that of the growth of total exports. If it is positive, then the growth of that commodity is higher than the growth of total world exports.

The term $\sum_i^n \sum_j^m (r_{il} - r_i)X_i^{kl}$ represent market distribution effects. Market Distribution Effect (ME) measures.

The term $\sum_i^n \sum_j^m (X_i^{kl\prime} - X_i^{kl} - r_{il}X_i^{kl})$ represent residual or competitiveness of a country's k export.

The caveats of this analysis have been provided by Richardson (1971) and mainly by Fagerberg and Sollie (1987). The most critical critique of constant market share analysis is mainly on the dynamicity of the analysis. Richardson (1971) and Tyszynski (1951) explain that constant market share analysis is discrete. This method is sensitive to establishing an observation period (Richardson, 1971). It is also recognized by Fagerberg and Sollie (1987) and Richardson (1971) that the establishment of observation and choosing the base year will alter the results. Constant market share analysis is also sensitive to commodity identification under observation. Commodity aggregate under a particular HS Code will alter the result (Richardson, 1971). The conclusion and the analysis fully recognize the caveats of this method. This method is a discrete method and sensitive to the point of observation.

Results and Discussion

This paper has provided a computation of competitiveness by using Leamer and Stern's (1970) approach to constant market share analysis in the world market, ASEAN, and ASEAN Dialog Partner's market.

Indonesia's Competitiveness in ASEAN

The ASEAN Market is a good reflection of Indonesia. 1989 – 1992 was a good combination of domestic reform and a free trade agreement. Indonesian products' competitiveness increased by USD 49 million in 1989-1992. Then competitiveness tends to decrease from USD 49 million during 1989-1992 to about USD 2.3 million during 1992-1997. The same phenomenon happened during 2004-2009. ASEAN leaders agreed to establish the ASEAN Economic Community (AEC) during the ASEAN Leaders Summit 2003. Soesilo Bambang Yudhoyono established a series of domestic reforms such as removing fuel subsidies, establishing the Indonesian National Single Window (INSW), establishing a specific team for export development, establishing Trade Laws, and various trade facilitation improvement (WTO, 2007; Boediono, 2016). The competitiveness went up to USD 1.2 billion during 2004 – 2009. After this period, competitiveness reduces through time until 2021.

Table 1. Constant Market Share for Indonesia's Export Growth to the ASEAN Market

No	Products	ASEAN's MARKET					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	Primary Prods	678.561,32	-456.917,78	-100.701,24	4.888,37	125.830,68	3.532.358,46	6.833.115,06	120.496,82	-9.335.529,15	1.150.441,19
2	ResourceBased	393.958,78	-103.513,60	-105.577,31	7.668,38	192.536,05	3.116.063,52	2.666.789,67	58.248,47	-2.597.084,62	3.244.017,04
3	LowTech	247.124,00	130.050,45	464.961,04	-	842.135,49	1.045.013,43	717.416,95	176.345,98	3.032.020,26	4.970.796,63
4	MediumTech	201.417,00	50.547,70	523.212,19	37.074,04	812.250,94	323.438,16	-48.425,00	151.269,35	1.417.535,44	1.843.817,95
5	HighTech	29.594,22	5.514,59	183.928,27	64,43	219.101,52	56.906,16	26.551,17	10.302,81	636.039,43	729.799,56
Total	1989-1992	1.550.655,33	-374.318,84	965.822,96	49.695,23	2.191.854,68	8.073.779,73	10.195.447,85	516.663,43	-6.847.018,64	11.938.872,37
1	PrimaryProds	1.093.110,49	-394.443,84	409.161,13	139,20	1.107.966,98	5.274.511,39	-2.395.467,18	208.297,32	461.161,76	3.548.503,29
2	ResourceBased	752.751,64	-292.715,48	145.396,42	19.766,33	625.198,92	5.742.793,31	60.229,67	140.633,45	4.953.778,61	10.897.435,04
3	LowTech	1.185.295,22	-873.378,14	-67.348,59	1.237,44	245.805,93	3.824.359,04	-759.592,34	-179.661,34	-1.705.384,87	1.179.720,49
4	MediumTech	1.090.500,94	-722.414,44	-86.002,11	8.540,46	290.624,86	1.332.944,44	-460.087,25	-34.294,56	1.114.786,44	1.953.349,07
5	HighTech	258.843,30	193.619,29	666.003,11	61,94	1.118.527,64	432.728,53	187.546,80	210.175,09	1.067.140,24	1.897.590,67
Total	1992-1997	4.380.501,59	-2.089.332,60	1.067.209,96	29.745,37	3.388.124,33	16.607.336,71	-3.367.370,29	345.149,96	5.891.482,19	19.476.598,56
1	PrimaryProds	-342.582,80	-52.091,91	2.049,74	399,98	-392.225,00	2.782.948,38	7.585.866,84	-1.105.814,85	-11.320.320,03	-2.057.319,66
2	ResourceBased	-214.591,25	2.273,61	289.706,94	1.981,52	79.370,83	4.395.420,43	8.581.930,01	277.890,58	-19.590.989,86	-6.335.748,84
3	LowTech	-223.591,32	-380.691,73	306.104,37	1,84	-298.176,85	1.747.377,92	-1.268.505,79	-571.638,14	2.606.046,09	2.513.280,08
4	MediumTech	-215.687,65	-45.113,76	362.463,96	-0,00	101.662,55	908.393,06	-422.956,24	-261.355,73	251.905,79	475.986,88
5	HighTech	-213.616,79	73.773,21	598.099,07	-	458.255,49	540.159,27	371.441,96	-524.156,08	238.195,26	625.640,41
Total	1997-1999	-1.210.069,83	-401.850,57	1.558.424,08	2.383,34	-51.112,98	10.374.299,07	14.847.776,78	-2.185.074,22	-27.815.162,75	-4.778.161,13
1	PrimaryProds	1.022.288,93	1.096.539,10	-482.999,64	2.707,68	1.638.536,06	7.453.423,29	4.177.311,27	436.418,49	-5.130.345,86	6.936.807,19
2	ResourceBased	822.786,97	362.402,46	-114.590,77	71.318,71	1.141.917,38	9.898.584,00	3.524.660,76	164.166,69	-6.539.001,92	7.048.409,53
3	LowTech	643.534,67	-67.406,99	-531.345,58	-0,00	44.782,10	6.989.567,36	-1.416.869,09	-124.837,20	-3.578.576,14	1.869.284,95
4	MediumTech	839.274,06	70.643,54	163.188,48	15,74	1.073.121,82	3.129.447,07	-58.876,89	-27.851,83	675.205,83	3.717.924,18
5	HighTech	1.031.895,53	-299.534,51	421.518,38	-0,00	1.153.879,40	2.068.828,24	-1.056.052,67	188.370,42	2.143.476,80	3.344.622,79
Total	1999-2004	4.359.780,16	1.162.643,60	-544.229,12	74.042,13	5.052.236,79	29.539.849,96	5.170.173,39	636.266,57	-12.429.241,28	22.917.048,64
1	PrimaryProds	1.612.097,82	1.691.399,15	1.283.638,91	-0,00	4.587.135,89	8.921.254,74	9.278.353,49	204.649,03	3.498.253,15	21.902.510,41
2	ResourceBased	1.215.093,45	763.035,22	725.686,05	1.268.088,79	3.971.903,50	10.843.248,94	6.998.498,03	178.222,21	-4.499.549,28	13.520.419,89
3	LowTech	555.107,85	320.532,45	-312.856,99	0,00	562.783,32	6.213.811,11	-2.032.775,84	370.153,83	-1.494.462,80	3.056.726,29
4	MediumTech	1.196.727,39	56.083,86	860.620,15	-0,00	2.113.431,41	4.119.652,70	-1.328.874,17	262.655,56	3.323.107,19	6.376.541,29
5	HighTech	1.394.262,38	-954.438,82	-412.558,55	0,00	27.265,02	3.135.128,26	-787.511,63	-482.572,86	-1.793.717,99	71.325,78
Total	2004-2009	5.973.288,90	1.876.611,87	2.144.529,58	1.268.088,79	11.262.519,13	33.233.095,75	12.127.689,87	533.107,77	-966.369,73	44.927.523,66
1	PrimaryProds	6.474.540,51	-1.617.141,61	-2.993.649,73	0,00	1.863.749,16	2.741.138,50	-10.046.569,76	5.519.991,67	12.667.948,37	10.882.508,78
2	ResourceBased	5.293.973,13	12.248.049,16	-8.946.390,97	19.249,98	8.614.881,31	2.458.334,09	-2.453.584,98	16.443.524,55	11.096.312,83	27.544.586,49
3	LowTech	1.411.389,69	778.238,23	-1.439.857,25	105,97	749.876,65	1.096.028,03	2.839.720,26	1.454.601,73	4.548.524,61	9.938.874,64
4	MediumTech	3.766.981,50	-567.382,11	149.093,96	-0,00	3.348.693,35	1.016.637,35	-102.724,35	2.440.503,63	5.657.517,49	9.011.934,13
5	HighTech	2.429.622,55	-935.061,61	-1.354.672,03	-0,00	139.888,91	454.934,00	365.573,92	1.156.349,09	171.441,50	2.148.298,52
Total	2009-2014	19.376.507,38	9.906.702,06	-14.585.476,02	19.355,95	14.717.089,38	7.767.071,98	-9.397.584,91	27.014.970,67	34.141.744,81	59.526.202,55
1	PrimaryProds	1.441.284,40	1.426.700,63	-2.391.406,22	4,08	476.582,90	5.298.182,42	-4.480.897,72	2.019.972,46	-9.619.868,97	-6.782.611,81
2	ResourceBased	2.209.676,03	-3.220.293,10	-2.574.600,45	1.744,28	-3.583.473,24	6.563.596,04	-7.871.253,15	880.529,70	-7.591.799,25	-8.018.926,66
3	LowTech	364.153,73	103.176,35	521.650,57	-0,00	988.980,65	2.687.743,14	-3.563.097,87	262.498,56	3.913.175,90	3.300.319,73
4	MediumTech	1.167.848,60	187.561,08	551.671,24	0,00	1.907.080,92	2.471.964,35	-871.610,93	771.754,16	1.285.040,43	3.657.148,01
5	HighTech	459.489,10	632.363,62	-972.133,31	0,00	119.719,41	914.178,03	336.899,60	-84.625,75	-1.675.580,35	-509.128,47
Total	2014-2019	5.642.451,86	-870.491,42	-4.864.818,18	1.748,37	-91.109,37	17.935.663,98	-16.449.960,07	3.850.129,12	-13.689.032,24	-8.353.199,21
1	PrimaryProds	1.928.273,54	550.494,73	1.763.206,61	48,09	4.242.022,98	15.183.834,70	30.563.286,58	-5.283.730,58	-20.289.328,30	20.174.062,40
2	ResourceBased	2.155.443,74	-433.381,20	1.451.159,56	0,00	3.173.222,10	18.939.151,24	31.125.182,74	-11.204.678,01	-19.905.859,73	18.953.796,25
3	LowTech	648.431,57	21.289,91	-633.478,26	-0,00	36.243,22	9.966.279,08	1.186.999,25	-526.676,15	-1.530.432,13	9.096.170,05
4	MediumTech	1.844.780,84	-711.171,19	-613.157,52	-0,00	520.452,14	9.374.950,18	-54.226,69	-1.394.445,33	5.196.690,37	13.122.968,52
5	HighTech	608.763,12	-4.641,28	-432.084,61	-0,00	172.037,22	2.841.921,31	1.253.069,68	-800.043,83	-802.481,38	2.492.465,78
Total	2019-2021	7.185.692,82	-577.409,04	1.535.645,79	48,09	8.143.977,66	56.306.136,51	64.074.311,56	-19.209.573,90	-37.331.411,17	63.839.463,00

Source: Own computation

Indonesia's Competitiveness in ASEAN Dialog Partners' Market

Japanese Market

The competitiveness of Indonesian products in Japan is showing positive signs but with minimal contribution to the total growth of exports. Indonesia's competitiveness remained positive from 1989 to 2022. During the Asian economic crisis, Indonesia's export growth to Japan amounted to USD 2 billion, and competitiveness contributed to USD 4.8 million during 1997- 1999.

Medium-tech competitiveness significantly contributed to Indonesia's competitiveness in the Japanese market before the Asian Economic Crisis 1998. However, medium-tech competitiveness was reduced along with Japanese investment diversification in ASEAN (Aslam & Yee, 2023).

One interesting observation that is taken into consideration is from 2009 to 2014. There was a significant jump in competitiveness from 2009 to 2014 after the IJEPA entered into force in 2008. IJEPA contributed to the increase in Indonesia's competitiveness in the Japanese market. However, competitiveness tends to reduce to USD 17 thousand during 2019-2021.

Table 2. Constant Market Share for Indonesia's Export Growth to the Japanese Market

No	Products	Japan's Market					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	PrimaryProds	1.001.615,08	426.468,74	-1.241.901,71	21,21	186.203,32	3.532.358,46	6.833.115,06	-3.491.099,27	-5.723.933,06	1.150.441,19
2	ResourceBased	1.019.052,32	1.160.527,33	-1.401.656,45	5.788,43	783.711,63	3.116.063,52	2.666.789,67	-1.211.025,45	-1.327.810,70	3.244.017,04
3	LowTech	85.611,11	-8.672,80	289.475,92	12,61	366.426,85	1.045.013,43	717.416,95	-10.322,08	3.218.688,33	4.970.796,63
4	MediumTech	17.891,16	-2.067,25	5.388,64	5.147,41	26.359,96	323.438,16	-48.425,00	5.465,89	1.563.338,90	1.843.817,95
5	HighTech	6.297,70	8.873,30	77.711,22	2.202,71	95.084,93	56.906,16	26.551,17	2.961,07	643.381,17	729.799,56
Total	1989 - 1992	2.130.467,38	1.585.129,33	-2.270.982,38	13.172,36	1.457.786,69	8.073.779,73	10.195.447,85	-4.704.019,84	-1.626.335,36	11.938.872,37
1	PrimaryProds	2.230.884,86	-1.214.611,74	-1.177.812,17	1.576,02	-159.963,03	5.274.511,39	-2.395.467,18	6.843,82	662.615,25	3.548.503,29
2	ResourceBased	2.560.469,96	-1.147.663,28	-1.000.253,84	727.638,99	1.140.191,83	5.742.793,31	60.229,67	-1.570.571,89	6.664.983,95	10.897.435,04
3	LowTech	362.169,70	111.940,47	-329.727,62	3,01	144.385,56	3.824.359,04	-759.592,34	81.429,14	-1.966.475,35	1.179.720,49
4	MediumTech	51.118,21	10.265,60	245.930,95	17.387,93	324.702,70	1.332.944,44	-460.087,25	6.988,85	1.073.503,04	1.953.349,07
5	HighTech	59.974,68	104.451,01	110.627,56	81,14	275.134,39	432.728,53	187.546,80	62.571,29	1.214.744,04	1.897.590,67
Total	1992 - 1997	5.264.617,41	-2.135.617,95	-2.151.235,12	746.687,10	1.724.451,45	16.607.336,71	-3.367.370,29	-1.412.738,79	7.649.370,93	19.476.598,56
1	PrimaryProds	-113.287,89	1.716.880,02	-2.305.880,96	168,89	-702.119,93	2.782.948,38	7.585.866,84	-1.211.050,36	-11.215.084,52	-2.057.319,66
2	ResourceBased	-164.110,13	-920.764,35	-561.900,45	2.805,67	-1.643.969,26	4.395.420,43	8.581.930,01	-4.572.427,92	-14.740.671,36	-6.335.748,84
3	LowTech	-22.777,91	-54.064,64	140.661,44	445,91	64.264,80	1.747.377,92	-1.268.505,79	-83.214,74	2.117.622,69	2.513.280,08
4	MediumTech	-11.050,81	6.603,18	103.996,39	850,08	100.398,84	908.393,06	-422.956,24	-50.374,51	40.924,57	475.986,88
5	HighTech	-10.240,60	35.288,00	68.017,09	591,36	93.655,85	540.159,27	371.441,96	-76.285,56	-209.675,26	625.640,41
Total	1997 - 1999	-321.467,34	783.942,21	-2.555.106,48	4.861,91	-2.087.769,70	10.374.299,07	14.847.776,78	-5.993.353,09	-24.006.883,88	-4.778.161,13
1	PrimaryProds	1.678.397,50	650.367,39	-764.523,39	1.524,81	1.565.766,31	7.453.423,29	4.177.311,27	-365.366,68	-4.328.560,69	6.936.807,19
2	ResourceBased	2.146.806,36	2.593.573,08	-2.192.585,04	4.238,68	2.552.033,08	9.898.584,00	3.524.660,76	508.292,42	-6.883.127,65	7.048.409,53
3	LowTech	430.709,99	-73.628,40	-127.551,15	0,10	229.530,54	6.989.567,36	-1.416.869,09	-8.870,10	-3.694.543,23	1.869.284,95
4	MediumTech	240.380,54	175.108,17	344.966,41	91,16	760.546,28	3.129.447,07	-58.876,89	34.885,52	612.468,48	3.717.924,18
5	HighTech	223.037,13	-72.304,39	306.318,76	-	457.051,51	2.068.828,24	-1.056.052,67	62.623,26	2.269.223,95	3.344.622,79
Total	1999 - 2004	4.719.331,52	3.273.115,85	-2.433.374,41	5.854,75	5.564.927,72	29.539.849,96	5.170.173,39	231.564,43	-12.024.539,14	22.917.048,64
1	PrimaryProds	590.791,84	-474.054,33	2.887.168,48	0,01	3.003.905,99	8.921.254,74	9.278.353,49	-3.351.741,03	7.054.643,22	21.902.510,41
2	ResourceBased	817.325,36	2.629.967,95	-3.842.691,93	0,00	-395.398,63	10.843.248,94	6.998.498,03	-676.727,95	-3.644.599,12	13.520.419,89
3	LowTech	132.271,88	77.880,42	-186.468,93	0,00	23.683,38	6.213.811,11	-2.032.775,84	-106.458,03	-1.017.850,94	3.056.726,29
4	MediumTech	144.809,56	75.159,99	150.352,59	29,60	370.351,75	4.119.652,70	-1.328.874,17	-172.747,62	3.758.510,37	6.376.541,29
5	HighTech	106.455,26	-150.517,41	-346.106,07	246,87	-389.921,34	3.135.128,26	-787.511,63	-273.224,82	-2.003.066,03	71.325,78
Total	2004 - 2009	1.791.653,92	2.158.436,62	-1.337.745,86	276,47	2.612.621,15	33.233.095,75	12.127.689,87	-4.580.899,45	4.147.637,49	44.927.523,66
1	PrimaryProds	3.969.074,42	-831.738,80	-2.132.916,79	6,53	1.004.425,36	2.741.138,50	-10.046.569,76	3.481.431,39	14.706.508,66	10.882.508,78
2	ResourceBased	3.306.030,00	5.488.945,45	-8.184.907,57	856.534,26	1.466.602,15	2.458.334,09	-2.453.584,98	8.579.643,37	18.960.194,01	27.544.586,49
3	LowTech	577.122,29	-41.629,46	511.040,34	0,14	1.046.533,32	1.096.028,03	2.839.720,26	241.364,32	5.761.762,02	9.938.874,64
4	MediumTech	797.180,30	234.410,48	-497.484,90	0,15	534.106,03	1.016.637,35	-102.724,35	662.077,00	7.435.944,13	9.011.934,13
5	HighTech	268.132,25	-24.310,63	256.869,87	0,00	500.691,49	454.934,00	365.573,92	115.945,20	1.211.845,39	2.148.298,52
Total	2009 - 2014	8.917.539,27	4.825.677,03	-10.047.399,04	856.541,07	4.552.358,34	7.767.071,98	-9.397.584,91	13.080.461,28	48.076.254,20	59.526.202,55
1	PrimaryProds	-373.884,22	-1.620.500,97	-2.214.978,05	1.104,25	-4.208.258,98	5.298.182,42	-4.480.897,72	-1.603.861,52	-5.996.034,99	-6.782.611,81
2	ResourceBased	-336.829,32	-2.976.852,46	794,12	16.590,12	-3.296.297,55	6.563.596,04	-7.871.253,15	-1.005.698,83	-5.705.570,72	-8.018.926,66
3	LowTech	-90.676,56	89.134,60	87.120,04	39,57	85.617,65	2.687.743,14	-3.563.097,87	-67.825,39	4.243.499,85	3.300.319,73
4	MediumTech	-88.496,64	190.529,66	449.593,84	211,68	551.838,53	2.471.964,35	-871.610,93	48.811,07	2.007.983,52	3.657.148,01
5	HighTech	-42.712,02	-104.865,71	-109.237,41	88,24	-256.726,90	914.178,03	336.899,60	-80.676,74	-1.679.529,36	-509.128,47
Total	2014 - 2019	-932.598,76	-4.422.554,87	-1.786.707,47	18.033,85	-7.123.827,25	17.935.663,98	-16.449.960,07	-2.709.251,41	-7.129.651,70	-8.353.199,21
1	PrimaryProds	462.937,37	349.776,24	1.438.501,29	17,60	2.251.232,50	15.183.834,70	30.563.286,58	4.122.677,67	-29.695.736,55	20.174.062,40
2	ResourceBased	462.302,34	-394.364,94	-858.992,98	-0,00	-791.055,59	18.939.151,24	31.125.182,74	-2.488.069,77	-28.622.467,97	18.953.796,25
3	LowTech	213.412,25	-269.266,44	-24.080,53	-0,00	-79.934,73	9.966.279,08	1.186.999,25	-201.790,22	-1.855.318,06	9.096.170,05
4	MediumTech	251.094,54	-73.783,46	274.074,45	-0,00	451.385,53	9.374.950,18	-54.226,69	-402.798,99	4.205.044,03	13.122.968,52
5	HighTech	73.366,46	-13.745,83	-39.100,63	0,00	20.520,00	2.841.921,31	1.253.069,68	-133.197,98	-1.469.327,23	2.492.465,78
Total	2019 - 2021	1.463.112,95	-401.384,42	790.401,59	17,60	1.852.147,71	56.306.136,51	64.074.311,56	896.820,71	-57.437.805,79	63.839.463,00

Source: Own computation

Korean Market

Table 3. Constant Market Share for Indonesia's Export Growth to the Korean Market

No	Products	Korea's Market					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	PrimaryProds	80.329,70	140.265,44	304.889,97	1.629,71	527.114,82	3.532.358,46	6.833.115,06	38.609,68	-9.253.642,01	1.150.441,19
2	ResourceBased	145.167,16	366.677,90	14.760,30	27.311,74	553.917,10	3.116.063,52	2.666.789,67	80.282,57	-2.619.118,72	3.244.017,04
3	LowTech	22.851,73	-24.448,97	47.155,82	2.781,31	48.339,88	1.045.013,43	717.416,95	-14.942,27	3.223.308,52	4.970.796,63
4	MediumTech	3.234,02	784,27	23.044,25	2.935,14	29.997,67	323.438,16	-48.425,00	-2.255,17	1.571.059,96	1.843.817,95
5	HighTech	389,38	21,16	2.903,65	1.689,56	5.003,75	56.906,16	26.551,17	1.370,00	644.972,24	729.799,56
Total	1989-1992	251.971,98	483.299,80	392.753,99	36.347,45	1.164.373,23	8.073.779,73	10.195.447,85	103.064,79	-6.433.420,00	11.938.872,37
1	PrimaryProds	651.542,21	-389.727,40	148.719,59	305,30	410.839,70	5.274.511,39	-2.395.467,18	41.930,38	627.528,69	3.548.503,29
2	ResourceBased	860.698,51	706.945,88	-785.793,65	156.623,44	938.474,18	5.742.793,31	60.229,67	790.591,98	4.303.820,08	10.897.435,04
3	LowTech	104.617,27	151.257,53	-281.856,44	7.607,80	-18.373,84	3.824.359,04	-759.592,34	143.075,14	-2.028.121,35	1.179.720,49
4	MediumTech	33.203,48	-4.916,28	-32.674,69	36.480,29	32.092,81	1.332.944,44	-460.087,25	-5.751,13	1.086.243,01	1.953.349,07
5	HighTech	5.103,67	3.503,46	7.289,07	20,40	15.916,60	432.728,53	187.546,80	-7.666,86	1.284.982,19	1.897.590,67
Total	1992-1997	1.655.165,15	467.063,19	-944.316,11	201.037,23	1.378.949,45	16.607.336,71	-3.367.370,29	962.179,52	5.274.452,63	19.476.598,56
1	PrimaryProds	-158.655,71	110.750,47	-17.833,85	430,27	-65.308,82	2.782.948,38	7.585.866,84	-1.127.704,46	-11.298.430,42	-2.057.319,66
2	ResourceBased	-260.596,26	24.177,23	5.326,48	10.587,25	-220.505,29	4.395.420,43	8.581.930,01	-1.203.852,81	-18.109.246,47	-6.335.748,84
3	LowTech	-14.604,03	-7.539,21	153.161,81	170,51	131.189,09	1.747.377,92	-1.268.505,79	2.062,37	2.032.345,59	2.513.280,08
4	MediumTech	-9.523,23	-4.304,69	28.109,84	3.114,86	17.396,78	908.393,06	-422.956,24	5.738,13	-15.188,08	475.986,88
5	HighTech	-2.879,53	5.870,34	-8.463,81	284,20	-5.188,80	540.159,27	371.441,96	9.319,03	-295.279,85	625.640,41
Total	1997-1999	-446.258,75	128.954,14	160.300,48	14.587,08	-142.417,04	10.374.299,07	14.847.776,78	-2.314.437,74	-27.685.799,23	-4.778.161,12
1	PrimaryProds	1.007.089,95	-315.499,96	24.618,09	782,78	716.990,85	7.453.423,29	4.177.311,27	-359.079,59	-4.334.847,78	6.936.807,19
2	ResourceBased	1.556.336,81	1.091.617,81	-2.100.937,27	11.345,70	558.363,05	9.898.584,00	3.524.660,76	833.747,30	-7.208.582,53	7.048.409,53
3	LowTech	211.244,23	-104.428,65	-53.135,19	287,52	53.967,90	6.989.567,36	-1.416.869,09	-34.874,36	-3.668.538,97	1.869.284,95
4	MediumTech	78.868,14	-15.668,44	-21.988,31	37.142,66	78.354,06	3.129.447,07	-58.876,89	-28.461,74	675.815,74	3.717.924,18
5	HighTech	14.819,16	16.541,70	69.478,15	1.854,45	102.693,45	2.068.828,24	-1.056.052,67	-10.870,45	2.342.717,66	3.344.622,79
Total	1999-2004	2.868.358,28	672.562,47	-2.081.964,54	51.413,11	1.510.369,31	29.539.849,96	5.170.173,39	400.461,16	-12.193.435,87	22.917.048,64
1	PrimaryProds	911.649,45	1.690.791,62	101.249,78	2.272,35	2.705.963,21	8.921.254,74	9.278.353,49	870.609,97	2.832.292,22	21.902.510,41
2	ResourceBased	1.142.670,05	480.271,13	-1.517.307,23	48.244,16	153.878,10	10.843.248,94	6.998.498,03	174.684,98	-4.496.012,06	13.520.419,89
3	LowTech	144.530,20	-58.234,08	56.139,05	-	142.435,26	6.213.811,11	-2.032.775,84	4.985,56	-1.129.294,53	3.056.726,29
4	MediumTech	82.146,48	-60.829,98	287.201,28	-0,00	308.517,78	4.119.652,70	-1.328.874,17	-20.623,94	3.606.386,69	6.376.541,29
5	HighTech	58.035,36	23.222,24	-77.026,91	1,95	4.231,65	3.135.128,26	-787.511,63	43.095,67	-2.319.386,51	71.325,78
Total	2004-2009	2.339.031,63	2.075.220,92	-1.149.744,04	50.518,46	3.315.026,98	33.233.095,75	12.127.689,87	1.072.752,24	-1.506.014,20	44.927.523,66
1	PrimaryProds	2.903.172,95	-1.953.291,20	-2.027.809,22	3.173,38	-1.074.754,08	2.741.138,50	-10.046.569,76	1.255.038,48	16.932.901,57	10.882.508,78
2	ResourceBased	1.590.309,44	2.795.154,99	-1.534.750,51	51.386,72	2.902.100,65	2.458.334,09	-2.453.584,98	3.659.909,40	23.879.927,98	27.544.586,49
3	LowTech	278.954,15	84.913,11	10.935,25	3,10	374.805,60	1.096.028,03	2.839.720,26	136.026,05	5.867.100,30	9.938.874,64
4	MediumTech	302.527,14	-159.813,93	-21.956,26	310,43	121.067,38	1.016.637,35	-102.724,35	68.929,72	8.029.091,41	9.011.934,13
5	HighTech	78.503,84	20.107,40	39.134,82	304,77	138.050,84	454.934,00	365.573,92	17.654,65	1.310.135,95	2.148.298,52
Total	2009-2014	5.153.467,53	787.070,38	-3.534.445,91	55.178,40	2.461.270,40	7.767.071,98	-9.397.584,91	5.137.558,29	56.019.157,19	59.526.202,55
1	PrimaryProds	117.264,80	417.074,26	-1.679.680,06	6.513,33	-1.138.827,67	5.298.182,42	-4.480.897,72	160.012,79	-7.759.909,30	-6.782.611,81
2	ResourceBased	180.734,13	-2.212.437,22	-871.929,44	181.641,50	-2.721.991,03	6.563.596,04	-7.871.253,15	-6.458,93	-6.704.810,62	-8.018.926,66
3	LowTech	27.222,12	96.400,68	294.915,68	0,00	418.538,48	2.687.743,14	-3.563.097,87	68.823,73	4.106.850,73	3.300.319,73
4	MediumTech	19.997,59	-9.237,42	32.280,43	658,70	43.699,31	2.471.964,35	-871.610,93	-55.986,88	2.112.781,47	3.657.148,01
5	HighTech	8.747,93	-37.885,01	55.567,38	80,90	26.511,19	914.178,03	336.899,60	-7.689,58	-1.752.516,52	-509.128,47
Total	2014-2019	353.966,57	-1.746.084,70	-2.168.846,00	188.894,43	-3.372.069,71	17.935.663,98	-16.449.960,07	158.701,13	-9.997.604,24	-8.353.199,21
1	PrimaryProds	577.670,71	-133.027,38	216.952,20	985,21	662.580,74	15.183.834,70	30.563.286,58	2.618.983,64	-28.192.042,52	20.174.062,40
2	ResourceBased	655.182,18	-338.357,99	240.972,26	206,46	558.002,90	18.939.151,24	31.125.182,74	1.156.580,58	-32.267.118,32	18.953.796,25
3	LowTech	300.207,68	-247.801,15	-105.509,99	119,62	-52.983,84	9.966.279,08	1.186.999,25	-181.422,27	-1.875.686,01	9.096.170,05
4	MediumTech	156.379,27	17.225,64	-72.677,84	16,06	100.943,13	9.374.950,18	-54.226,69	82.343,28	3.719.901,76	13.122.968,52
5	HighTech	70.206,68	17.468,58	389.889,60	-	477.564,85	2.841.921,31	1.253.069,68	-83.517,69	-1.519.007,52	2.492.465,78
Total	2019-2021	1.759.646,51	-684.492,31	669.626,23	1.327,35	1.746.107,78	56.306.136,51	64.074.311,56	3.592.967,53	-60.133.952,61	63.839.463,00

Source: Own computation

Competitiveness remains positive from this period forward. Indonesia's competitiveness in the Korean market has not contributed significantly to export growth from 1989 to 2021. Along with positive competitiveness, Indonesia gained due to the transformation of the Korean Trade Policy. Starting from shifting into export promotion policy in the 1960s–1980s, Korea has brought up consistent policies to include liberalization as a package of economic reform (Haggard et al., 1991; Amsden, 2007). South Korea's export-oriented trade policy in the 1960s-1980s is a successful economic development model through strategic trade promotion (Amsden, 2007). A combination of domestic reform and trade liberalization has endorsed Korea's competitiveness (Amsden, 2007; Haggard et al., 1991)

In 2014 – 2019, Indonesia's exports to Korea dropped significantly. Competitiveness became a positive contributor, holding exports from further decline. Competitiveness was USD 188 million, and the total change of value was USD 3 billion in 2014 – 2019. This is when FTA is effective as a built-in stabilizer (Suryanta, 2021).

Chinese Market

ASEAN China FTA integrated Indonesia and China. At the beginning of the implementation period of ACFTA, there was a large demonstration and political pressure on domestic industry (Suryanta, 2021).

Table 4. Constant Market Share for Indonesia's Export Growth to the Chinese Market

No	Products	China's MARKET WGE	CE	ME	COMPE	TE	World Market WGE	CE	ME	COMPE	TE
1	PrimaryProds	186.711,73	528.198,57	-316.447,18	16.620,74	415.083,86	3.532.358,46	6.833.115,06	227.557,99	-9.442.590,32	1.150.441,19
2	ResourceBased	151.506,25	246.816,61	-19.605,99	48.515,05	427.231,91	3.116.063,52	2.666.789,67	170.475,24	-2.709.311,39	3.244.017,04
3	LowTech	9.436,67	-13.085,88	10.318,75	4.272,28	10.941,81	1.045.013,43	717.416,95	-22.513,07	3.230.879,31	4.970.796,63
4	MediumTech	35.643,41	-24.398,39	-44.579,09	8.364,45	-24.969,62	323.438,16	-48.425,00	-1.797,91	1.570.602,70	1.843.817,95
5	HighTech	58,71	21,39	-93,27	32,17	19,00	56.906,16	26.551,17	-1.532,53	647.874,77	729.799,56
Total	1989 - 1992	383.356,76	737.552,30	-370.406,79	77.804,69	828.306,96	8.073.779,73	10.195.447,85	372.189,72	-6.702.544,92	11.938.872,37
1	PrimaryProds	742.391,58	280.787,81	-737.193,41	44.996,85	330.982,84	5.274.511,39	-2.395.467,18	647.711,14	21.747,94	3.548.503,29
2	ResourceBased	699.437,76	-630.443,95	134.398,33	138.722,93	342.115,07	5.742.793,31	60.229,67	-168.665,57	5.263.077,62	10.897.435,04
3	LowTech	26.750,19	-2.107,15	-11.680,79	6.518,02	19.480,27	3.824.359,04	-759.592,34	-55.220,09	-1.829.826,12	1.179.720,49
4	MediumTech	29.890,83	9.332,59	78.554,58	13.789,58	131.567,58	1.332.944,44	-460.087,25	-36.271,02	1.116.762,91	1.953.349,07
5	HighTech	113,75	107,44	2.268,93	6.261,90	8.752,02	432.728,53	187.546,80	-3.675,47	1.280.990,81	1.897.590,67
Total	1992 - 1997	1.498.584,12	-342.323,26	-533.652,37	210.289,28	832.897,77	16.607.336,71	-3.367.370,29	383.878,99	5.852.753,16	19.476.598,56
1	PrimaryProds	22.304,46	-81.396,90	-227.605,66	8.152,02	-278.546,09	2.782.948,38	7.585.866,84	-1.249.380,79	-11.176.754,09	-2.057.319,66
2	ResourceBased	21.674,34	-39.808,89	-57.680,49	15.047,74	-60.767,30	4.395.420,43	8.581.930,01	113.012,12	-19.426.111,40	-6.335.748,84
3	LowTech	968,42	-6.338,68	50.200,22	1.440,82	46.270,78	1.747.377,92	-1.268.505,79	-4.206,44	2.038.614,39	2.513.280,08
4	MediumTech	3.476,63	3.267,30	41.835,72	10.865,75	59.445,41	908.393,06	-422.956,24	4.731,81	-14.181,75	475.986,88
5	HighTech	193,17	5.454,53	6.558,22	973,04	13.178,96	540.159,27	371.441,96	9.703,55	-295.664,37	625.640,41
Total	1997 - 1999	48.617,03	-118.822,64	-186.692,00	36.479,37	-220.418,25	10.374.299,07	14.847.776,78	-1.126.139,76	-28.874.097,21	-4.778.161,13
1	PrimaryProds	1.777.464,77	581.960,87	-1.628.795,18	654,08	731.284,53	7.453.423,29	4.177.311,27	1.216.506,75	-5.910.434,12	6.936.807,19
2	ResourceBased	2.228.587,38	-803.900,79	-450.072,86	8.088,00	982.701,73	9.898.584,00	3.524.660,76	669.360,89	-7.044.196,11	7.048.409,53
3	LowTech	216.569,96	-100.852,43	22.454,49	1.201,05	139.373,07	6.989.567,36	-1.416.869,09	13.667,01	-3.717.080,34	1.869.284,95
4	MediumTech	522.728,30	186.014,36	-185.589,45	8.526,32	531.679,53	3.129.447,07	-58.876,89	375.458,20	271.895,80	3.717.924,18
5	HighTech	52.631,90	1.873,63	156.226,98	46,26	210.778,77	2.068.828,24	-1.056.052,67	-97.538,41	2.429.385,63	3.344.622,79
Total	1999 - 2004	4.797.982,30	-134.904,36	-2.085.776,02	18.515,71	2.595.817,63	29.539.849,96	5.170.173,39	2.177.454,43	-13.970.429,14	22.917.048,64
1	PrimaryProds	1.427.730,77	2.309.042,04	-209.555,04	185.521,70	3.712.739,47	8.921.254,74	9.278.353,49	1.409.752,29	2.293.149,89	21.902.510,41
2	ResourceBased	1.853.775,63	1.267.672,86	-380.560,59	234,97	2.741.122,86	10.843.248,94	6.998.498,03	1.393.513,92	-5.714.840,99	13.520.419,89
3	LowTech	222.601,67	-164.224,18	-15.266,14	0,00	43.111,34	6.213.811,11	-2.032.775,84	10.776,64	-1.135.085,62	3.056.726,29
4	MediumTech	726.242,51	-328.320,71	-58.475,23	123,29	339.569,86	4.119.652,70	-1.328.874,17	25.434,37	3.560.328,38	6.376.541,29
5	HighTech	225.276,95	-89.303,57	-77.922,77	-	58.050,62	3.135.128,26	-787.511,63	-5.481,79	-2.270.809,05	71.325,78
Total	2004 - 2009	4.455.627,53	2.994.866,44	-741.779,78	185.879,96	6.894.594,15	33.233.095,75	12.127.689,87	2.833.995,43	-3.267.257,39	44.927.523,66
1	PrimaryProds	3.814.501,18	1.851.848,25	-3.199.594,12	8,73	2.466.764,04	2.741.138,50	-10.046.569,76	3.073.570,58	15.114.369,46	10.882.508,78
2	ResourceBased	3.423.868,55	4.897.761,87	-6.338.886,96	430,24	1.983.173,70	2.458.334,09	-2.453.584,98	7.511.316,70	20.028.520,67	27.544.586,49
3	LowTech	200.834,21	101.210,29	392.944,88	5,73	694.995,11	1.096.028,03	2.839.720,26	24.735,28	5.978.391,06	9.938.874,64
4	MediumTech	801.474,28	-329.625,08	417.807,61	1.368,59	891.025,40	1.016.637,35	-102.724,35	201.913,88	7.896.107,25	9.011.934,11
5	HighTech	213.850,60	-147.627,13	4.402,28	33,18	70.658,94	454.934,00	365.573,92	-89.735,88	1.417.526,48	2.148.298,52
Total	2009 - 2014	8.454.528,82	6.373.568,20	-8.723.326,30	1.846,47	6.106.617,19	7.767.071,98	-9.397.584,91	10.721.800,56	50.434.914,92	59.526.202,55
1	PrimaryProds	2.897.903,65	-376.962,60	348.209,65	23,08	2.869.173,78	5.298.182,42	-4.480.897,72	-164.889,13	-7.435.007,38	-6.782.611,81
2	ResourceBased	2.513.698,40	-1.716.183,90	3.270.636,79	14.701,12	4.082.852,41	6.563.596,04	-7.871.253,15	-317.467,34	-6.393.802,21	-8.018.926,66
3	LowTech	366.508,45	306.215,79	420.654,56	7,92	1.093.386,72	2.687.743,14	-3.563.097,87	412.594,13	3.763.080,33	3.300.319,73
4	MediumTech	749.986,51	-505.506,24	2.100.356,78	7.576,98	2.352.413,90	2.471.964,35	-871.610,93	-180.805,66	2.237.600,25	3.657.148,01
5	HighTech	136.860,06	9.096,96	-187.841,16	-0,00	-41.884,14	914.178,03	336.899,60	-253.319,89	-1.506.886,21	-509.128,47
Total	2014 - 2019	6.664.957,06	-2.283.340,12	5.952.016,63	22.309,10	10.355.942,67	17.935.663,98	-16.449.960,07	-503.887,89	-9.335.015,22	-8.353.199,21
1	PrimaryProds	3.026.113,00	1.506.569,95	5.284.149,82	12,03	9.816.844,80	15.183.834,70	30.563.286,58	1.892.886,28	-27.465.945,17	20.174.062,40
2	ResourceBased	3.083.268,24	-147.955,37	2.564.427,84	44,69	5.499.785,40	18.939.151,24	31.125.182,74	-3.218.189,44	-27.892.348,30	18.953.796,25
3	LowTech	592.774,13	-135.148,57	1.566.488,48	0,00	2.024.114,04	9.966.279,08	1.186.999,25	-227.095,08	-1.830.013,20	9.096.170,05
4	MediumTech	1.246.065,66	1.880.433,71	5.247.748,23	206,12	8.374.453,72	9.374.950,18	-54.226,69	734.813,62	3.067.431,42	13.122.968,52
5	HighTech	91.909,27	-43.588,86	56.492,99	6,03	104.819,43	2.841.921,31	1.253.069,68	-203.460,04	-1.399.065,17	2.492.465,78
Total	2019 - 2021	8.040.130,30	3.060.310,85	14.719.307,35	268,87	25.820.017,38	56.306.136,51	64.074.311,56	-1.021.044,66	-55.519.940,41	63.839.463,00

Source: Own computation

One of the findings of this computation is that Indonesia gained from China's accession to the WTO in 2001. After 2001, Indonesia's exports to China increased rapidly. However, China's liberalization does not alter the competitiveness of Indonesia's exports to China. Since the implementation of the ASEAN China Free Trade Agreement in 2005, Indonesia's export growth to China has been driven by world growth. Exports grew rapidly from 2004 to 2021.

Indian Market

Indonesia's export competitiveness to the Indian market remains buoyant and consistent from 1989 to 2021. Various factors favor Indonesia's products in the Indian market. India's trade policy shift from protectionism to trade liberalization after 1991 seems to favor Indonesia's export growth to India. India has liberalized its market since 1991 during Prime Minister Rao (Rajagopalan, 2021) asserts that the result of trade reform in India has increased income per capita by sevenfold. Indonesia's exports to India are growing, and there was a positive competitiveness effect from 1992 to 1997.

Table 5. Constant Market Share for Indonesia's Export Growth to Indian Market

No	Products	India's Market					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	PrimaryProds	- 435,30	79.660,82	- 80.257,23	15.119,46	14.087,75	3.532.358,46	6.833.115,06	68.864,09	- 9.283.896,42	1.150.441,19
2	ResourceBased	-2.864,78	- 4.436,93	8.257,01	5.546,12	6.501,42	3.116.063,52	2.666.789,67	- 11.196,44	- 2.527.639,71	3.244.017,04
3	LowTech	- 113,86	1.769,09	- 2.075,50	352,24	- 68,03	1.045.013,43	717.416,95	3.702,16	3.204.664,08	4.970.796,63
4	MediumTech	- 482,35	- 1.194,86	- 1.846,01	2.163,83	- 1.359,39	323.438,16	- 48.425,00	- 2.772,06	1.571.576,85	1.843.817,95
5	HighTech	- 11,20	- 55,78	- 52,72	181,32	61,63	56.906,16	26.551,17	732,06	645.610,18	729.799,56
Total	1989-1992	- 3.907,49	75.742,35	- 75.974,44	23.362,97	19.223,38	8.073.779,73	10.195.447,85	59.329,80	- 6.389.685,01	11.938.872,37
1	PrimaryProds	19.539,05	19.369,70	32.682,47	13.908,53	85.499,75	5.274.511,39	- 2.395.467,18	475,16	668.983,92	3.548.503,29
2	ResourceBased	43.015,05	106.279,58	227.932,45	3.687,94	380.915,61	5.742.793,31	60.229,67	19.927,65	5.074.484,41	10.897.435,04
3	LowTech	1.385,64	- 77,87	17.271,64	3.032,98	21.612,39	3.824.359,04	- 759.592,34	- 4.137,29	- 1.880.908,92	1.179.720,49
4	MediumTech	4.806,77	6.377,75	54.641,31	16.269,68	82.095,51	1.332.944,44	- 460.087,25	16.119,89	1.064.372,00	1.953.349,07
5	HighTech	204,11	570,61	1.164,62	6.038,07	7.977,41	187.546,80	- 2.006,66		1.279.321,99	1.897.590,67
Total	1992-1997	68.951,21	132.519,77	333.692,49	42.937,20	578.100,67	16.607.336,71	- 3.367.370,29	30.378,74	6.206.253,40	19.476.598,56
1	PrimaryProds	21.101,53	34.286,44	14.550,67	1.819,04	71.757,67	2.782.948,38	7.585.866,84	- 85.810,50	- 12.340.324,38	- 2.057.319,66
2	ResourceBased	85.111,10	196.159,18	- 88.761,58	15.456,95	207.965,66	4.395.420,43	8.581.930,01	94.411,57	- 19.407.510,85	- 6.335.748,84
3	LowTech	4.615,81	2.072,69	26.661,70	882,11	34.232,31	1.747.377,92	- 1.268.505,79	1.527,60	2.032.880,35	2.513.280,08
4	MediumTech	17.441,05	- 40.102,96	- 26.009,78	2.724,62	- 45.947,07	908.393,06	- 422.956,24	- 33.205,88	23.755,93	475.986,88
5	HighTech	1.641,64	- 2.179,44	- 3.917,22	3.383,62	- 1.071,40	371.441,96	1.142,54		- 287.103,36	625.640,41
Total	1997-1999	129.911,12	190.235,90	- 77.476,20	24.266,34	266.937,17	10.374.299,07	14.847.776,78	- 21.934,66	- 29.978.302,31	- 4.778.161,13
1	PrimaryProds	180.245,19	142.886,16	57.787,60	283,47	381.202,42	7.453.423,29	4.177.311,27	35.590,07	- 4.729.517,44	6.936.807,19
2	ResourceBased	644.019,41	- 514.119,45	597.091,49	448,32	727.439,77	9.898.584,00	3.524.660,76	- 241.142,54	- 6.133.692,68	7.048.409,53
3	LowTech	58.309,19	21.296,63	- 43.291,63	1.093,43	37.407,62	6.989.567,36	- 1.416.869,09	41.458,26	- 3.744.871,60	1.869.284,95
4	MediumTech	41.756,24	6.301,94	23.304,84	1.619,26	72.982,27	3.129.447,07	- 58.876,89	22.909,91	624.444,09	3.717.924,18
5	HighTech	7.244,39	4.255,84	22.232,62	898,97	34.631,82	2.068.828,24	- 1.056.052,67	- 12.119,08	2.343.966,29	3.344.622,79
Total	1999-2004	931.574,41	- 339.378,87	657.124,92	4.343,45	1.253.663,91	29.539.849,96	5.170.173,39	- 153.303,38	- 11.639.671,33	22.917.048,64
1	PrimaryProds	984.852,25	391.093,68	959.636,05	104,41	2.335.686,39	8.921.254,74	9.278.353,49	323.779,83	3.379.122,35	21.902.510,41
2	ResourceBased	2.399.130,49	- 68.120,22	254.953,43	19.971,43	2.605.935,12	10.843.248,54	6.998.480,03	67.733,65	- 4.389.060,72	13.520.419,89
3	LowTech	167.007,95	- 31.024,26	- 118.703,46	3,03	17.283,26	6.213.811,11	- 2.032.775,84	63.058,91	- 1.187.367,88	3.056.726,29
4	MediumTech	201.107,17	- 20.636,58	1.244,92	32.428,09	214.143,60	4.119.652,70	- 1.328.874,17	46.623,01	3.539.139,74	6.376.541,29
5	HighTech	73.656,79	- 22.688,10	31.663,49	38,73	82.670,92	3.135.128,26	- 787.511,63	- 16.349,94	- 2.259.940,91	71.325,78
Total	2004-2009	3.825.754,65	248.624,52	1.128.794,43	52.545,69	5.255.719,29	33.233.095,75	12.127.689,87	484.845,45	- 918.107,42	44.927.523,66
1	PrimaryProds	1.597.670,33	580.830,94	1.524.719,14	74.812,04	3.778.032,44	2.741.138,50	- 10.046.569,76	1.287.540,33	16.900.399,71	10.882.508,78
2	ResourceBased	2.189.384,82	- 150.945,19	- 1.592.939,46	4.600,64	450.100,81	2.458.334,09	- 2.453.584,98	873.354,57	26.666.482,81	27.544.586,49
3	LowTech	61.796,88	22.121,40	- 19.100,04	0,00	64.818,24	1.096.028,03	2.839.720,26	17.611,33	5.985.515,02	9.938.874,64
4	MediumTech	181.151,79	43.014,62	42.599,43	69.205,35	335.971,19	1.016.637,35	- 102.724,35	131.393,97	7.966.627,16	9.011.934,13
5	HighTech	68.688,59	- 31.463,42	98.965,50	-	136.190,67	454.934,00	365.573,92	13.729,51	1.314.061,08	2.148.298,52
Total	2009-2014	4.098.692,41	463.558,34	54.244,57	148.618,03	4.765.113,35	7.767.071,98	- 9.397.584,91	2.323.629,70	58.833.085,78	59.526.202,55
1	PrimaryProds	951.724,26	957.541,28	- 2.751.122,30	240.946,57	- 600.910,19	5.298.182,42	- 4.480.897,72	612.190,39	- 8.212.086,89	- 6.782.611,81
2	ResourceBased	629.887,37	- 1.256.853,83	- 264.958,62	24.717,21	- 867.207,87	6.563.596,04	- 7.871.253,15	- 110.114,49	- 6.601.155,06	- 8.018.926,66
3	LowTech	25.212,91	7.045,57	623.593,11	577,08	656.428,67	2.687.743,14	- 3.563.097,87	- 19.473,96	4.195.148,42	3.300.319,73
4	MediumTech	94.730,47	- 12.935,88	327.343,73	2.878,58	412.016,90	2.471.964,35	- 871.610,93	- 39.938,08	2.096.732,67	3.657.148,01
5	HighTech	37.174,64	63.957,40	- 106.631,97	0,97	- 5.498,96	914.178,03	336.899,60	- 10.146,65	- 1.750.059,45	- 509.128,47
Total	2014-2019	1.738.729,66	- 241.245,46	- 2.171.776,05	269.120,40	- 405.171,45	17.935.663,98	- 16.449.960,07	432.517,19	- 10.271.420,30	- 8.353.199,21
1	PrimaryProds	1.414.080,54	- 821.934,33	- 718.252,00	65,79	- 126.040,00	15.183.834,70	30.563.286,58	- 1.337.180,35	- 24.235.878,54	20.174.062,40
2	ResourceBased	826.533,19	1.095.494,34	- 782.117,05	63,05	1.139.973,53	18.939.151,24	31.125.182,74	2.301.960,81	- 33.412.498,55	18.953.796,25
3	LowTech	194.068,61	32.441,42	- 279.703,99	- 0,00	- 53.193,96	9.966.279,08	1.186.999,25	- 124.211,61	- 1.932.896,67	9.096.170,05
4	MediumTech	250.652,43	143.228,21	134.375,64	828,43	529.084,71	9.374.950,18	- 54.226,69	- 78.495,42	3.880.740,46	13.122.968,52
5	HighTech	59.420,74	62.713,71	- 138.264,12	0,75	- 16.128,92	2.841.921,31	1.253.069,68	26.661,16	- 1.629.186,37	2.492.465,78
Total	2019-2021	2.744.755,50	511.943,35	- 1.783.961,52	958,02	1.473.695,36	56.306.136,51	64.074.311,56	788.734,59	- 57.329.719,67	63.839.463,00

Source: Own computation

Australian Market

Based on the Constant Market Share computation, the world growth effect dominates the contribution from 1989 – to 2022. Competitiveness remained positive before and after the implementation of AANZFTA and IA CEPA. There is no fundamental shift in terms of competitiveness due to liberalization. However, the effects of market and commodity composition fluctuated in different periods from 1989 to 2022. During both financial crises, market effects tended to be negative, so Australia prefers to import products from other sources than Indonesia.

However, it will not happen during 2019 – 2021. Market effects tended to be positive. Australian importers are sensitive to the security of transactions. They will shift their sources to a more secure market when trade risk is high. It is essential to build confidence in the banking system for international transactions.

Table 6. Constant Market Share for Indonesia's Export Growth to the Australian Market

No	Products	Australia's Market					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	PrimaryProds	14.091,38	244.208,41	- 53.297,29	8.106,09	213.108,58	3.532.358,46	6.833.115,06	- 96.476,45	- 9.118.555,88	1.150.441,19
2	ResourceBased	3.132,78	11.090,51	20.569,86	2.734,22	37.527,37	3.116.063,52	2.666.789,67	8.495,95	- 2.547.332,10	3.244.017,04
3	LowTech	3.273,12	9.817,39	67.540,86	2.380,43	83.011,80	1.045.013,43	717.416,95	- 10.812,76	3.219.179,00	4.970.796,63
4	MediumTech	1.451,93	- 126,94	24.349,49	1.084,46	26.758,93	323.438,16	- 48.425,00	- 6.699,51	1.575.504,30	1.843.817,95
5	HighTech	262,21	- 60,97	2.268,41	849,05	3.318,71	56.906,16	26.551,17	- 1.450,79	647.793,03	729.799,56
Total	1989-1992	22.211,42	264.928,39	61.431,33	15.154,25	363.725,40	8.073.779,73	10.195.447,85	- 106.943,56	- 6.223.411,65	11.938.872,37
1	PrimaryProds	210.177,07	- 86.305,48	182.153,54	162,83	306.187,97	5.274.511,39	- 2.395.467,18	52.701,65	616.757,43	3.548.503,29
2	ResourceBased	42.182,94	- 4.002,54	6.513,29	274.020,94	318.714,62	5.742.793,31	60.229,67	24.910,12	5.069.501,63	10.897.435,04
3	LowTech	64.275,84	- 18.607,90	46.289,55	1.985,95	93.943,44	3.824.359,04	- 759.592,34	- 10.912,37	- 1.874.133,84	1.179.720,49
4	MediumTech	23.870,24	- 313,89	18.279,21	1.499,31	43.334,87	1.332.944,44	- 460.087,25	1.905,30	1.078.586,58	1.953.349,07
5	HighTech	3.612,64	- 113,63	5.491,22	141,87	9.132,11	432.728,53	187.546,80	- 16,82	1.277.332,16	1.897.590,67
Total	1992-1997	344.118,74	- 109.343,44	258.726,81	277.810,90	771.313,00	16.607.336,71	- 3.367.370,29	68.587,88	6.168.044,26	19.476.598,56
1	PrimaryProds	42.914,40	395.103,02	- 510.032,90	8.915,63	- 63.099,86	2.782.948,38	7.585.866,84	- 795.317,90	- 11.630.816,98	- 2.057.319,66
2	ResourceBased	23.103,79	- 28.603,16	- 87.518,69	10.073,11	- 82.944,95	4.395.420,43	8.581.930,01	- 228.651,54	- 19.084.447,74	- 6.335.748,84
3	LowTech	13.141,20	5.266,03	41.251,91	2.453,94	62.113,09	1.747.377,92	- 1.268.505,79	- 2.055,69	2.036.463,64	2.513.280,08
4	MediumTech	5.356,06	- 16.856,93	58.413,91	331,94	47.244,98	908.393,06	- 422.956,24	- 22.799,09	13.349,15	475.986,88
5	HighTech	955,58	992,31	2.073,73	36,84	4.058,46	540.159,27	371.441,96	4.144,95	- 290.105,78	625.640,41
Total	1997-1999	85.471,03	355.901,27	- 495.812,04	21.811,45	- 32.628,30	10.374.299,07	14.847.776,78	- 1.044.679,26	- 28.955.557,71	- 4.778.161,13
1	PrimaryProds	443.288,18	508.887,46	- 846.029,07	167,27	106.313,83	7.453.423,29	4.177.311,27	433.386,07	- 5.127.313,44	6.936.807,19
2	ResourceBased	207.584,91	85.875,93	- 147.058,34	192,13	146.594,63	9.898.584,00	3.524.660,76	106.723,90	- 6.481.559,13	7.048.409,53
3	LowTech	187.403,75	- 67.172,87	- 119.686,35	0,63	545,17	6.989.567,36	- 1.416.869,09	- 15.212,35	- 3.688.200,98	1.869.284,95
4	MediumTech	90.292,83	- 23.380,50	26.149,63	2.646,93	95.708,90	3.129.447,07	- 58.876,89	- 14.171,92	661.525,92	3.717.924,18
5	HighTech	13.336,61	- 4.861,91	44.940,87	-	53.415,58	2.068.828,24	- 1.056.052,67	350,93	2.331.496,28	3.344.622,79
Total	1999-2004	941.906,28	499.348,11	- 1.041.683,25	3.006,96	402.578,11	29.539.849,96	5.170.173,39	511.076,63	- 12.304.051,34	22.917.048,64
1	PrimaryProds	389.353,24	- 95.298,67	587.383,12	62,58	881.500,26	8.921.254,74	9.278.353,49	- 296.379,32	3.999.281,50	21.902.510,41
2	ResourceBased	229.146,25	515.991,58	- 574.269,80	88,29	170.956,32	10.843.248,94	6.998.498,03	313.124,42	- 4.634.451,50	13.520.419,89
3	LowTech	143.130,00	29.046,59	- 74.980,43	- 0,00	97.196,16	6.213.811,11	- 2.032.775,84	51.374,01	- 1.175.682,98	3.056.726,29
4	MediumTech	115.120,26	- 34.362,91	58.447,96	291,68	139.496,99	4.119.652,70	- 1.328.874,17	- 12.448,76	3.598.211,51	6.376.541,29
5	HighTech	35.999,51	467,81	50.865,58	382,15	87.715,04	3.135.128,26	- 787.511,63	5.679,16	- 2.281.970,00	71.325,78
Total	2004-2009	912.749,26	415.844,39	47.446,43	824,69	1.376.864,76	33.233.095,75	12.127.689,87	61.349,50	- 494.611,46	44.927.523,66
1	PrimaryProds	773.113,62	610.886,85	- 1.489.389,06	772,30	- 104.616,29	2.741.138,50	- 10.046.569,76	1.861.350,53	16.326.589,51	10.882.508,78
2	ResourceBased	295.558,50	- 171.597,06	- 121.096,32	1.625,08	4.490,20	2.458.334,09	- 2.453.584,98	- 180.689,02	27.720.526,40	27.544.586,49
3	LowTech	180.218,01	46.538,94	763.879,82	-	990.636,77	1.096.028,03	2.839.720,26	75.844,81	5.927.281,54	9.938.874,64
4	MediumTech	173.059,39	- 57.347,04	624.868,23	66,92	740.647,50	1.016.637,35	- 102.724,35	64.759,55	8.033.261,58	9.011.934,13
5	HighTech	74.329,28	- 79.806,68	72.547,52	0,00	67.070,12	454.934,00	365.573,92	- 7.016,99	1.334.807,58	2.148.298,52
Total	2009-2014	1.496.278,79	348.675,01	- 149.189,80	2.464,31	1.698.228,30	7.767.071,98	- 9.397.584,91	1.814.248,87	59.342.466,61	59.526.202,55
1	PrimaryProds	- 22.145,17	- 728.230,82	- 474.456,88	6.448,36	- 1.218.384,52	5.298.182,42	- 4.480.897,72	- 394.698,54	- 7.205.197,97	- 6.782.611,81
2	ResourceBased	- 9.088,73	- 55.091,10	195.844,26	6.592,31	138.256,74	6.563.596,04	- 7.871.253,15	- 12.981,34	- 6.698.288,21	- 8.018.926,66
3	LowTech	- 19.370,90	- 328.483,24	- 475.326,16	0,00	- 823.180,29	2.687.743,14	- 3.563.097,87	- 378.902,31	4.554.576,77	3.300.319,73
4	MediumTech	- 15.652,83	- 88.329,27	- 569.051,63	1,17	- 673.032,56	2.471.964,35	- 871.610,93	- 173.206,37	2.230.000,96	3.657.148,01
5	HighTech	- 3.208,77	- 7.593,98	- 46.759,27	75,48	- 57.486,54	914.178,03	336.899,60	- 8.339,67	- 1.751.866,43	- 509.128,47
Total	2014-2019	- 69.466,40	- 1.207.728,41	- 1.369.749,68	13.117,32	- 2.633.827,16	17.935.663,98	- 16.449.960,07	- 968.128,23	- 8.870.774,88	- 8.353.199,21
1	PrimaryProds	73.150,11	- 96.208,42	127.500,76	30,69	104.473,14	15.183.834,70	30.563.286,58	- 146.729,51	- 25.426.329,38	20.174.062,40
2	ResourceBased	158.439,39	72.977,20	- 254.539,66	418,70	- 22.704,37	18.939.151,24	31.125.182,74	109.331,58	- 31.219.869,32	18.953.796,25
3	LowTech	112.787,65	44.942,12	258.729,37	- 0,00	416.459,15	9.966.279,08	1.186.999,25	28.481,47	- 2.085.589,75	9.956.170,05
4	MediumTech	89.558,99	78.487,18	120.945,36	4,03	288.995,56	9.374.950,18	- 54.226,69	3.196,07	3.799.048,97	13.122.968,52
5	HighTech	34.551,22	6.322,77	65.832,46	414,34	107.120,79	2.841.921,31	1.253.069,68	41.646,43	- 1.644.171,64	2.492.465,78
Total	2019-2021	468.487,35	106.520,87	318.468,29	867,76	894.344,26	56.306.136,51	64.074.311,56	35.926,04	- 56.576.911,12	63.839.463,00

Source: Own computation

New Zealand Market

Table 7. Constant Market Share for Indonesia's Export Growth to New Zealand Market

No	Products	New Zealand's Market					World Market				
		WGE	CE	ME	COMPE	TE	WGE	CE	ME	COMPE	TE
1	PrimaryProds	3.765,64	- 9.537,89	- 33.534,10	872,46	- 38.433,89	3.532.358,46	6.833.115,06	- 59.279,69	- 9.155.752,64	1.150.441,19
2	ResourceBased	159,55	- 74,27	1.805,68	2.141,97	4.032,92	3.116.063,52	2.666.789,67	- 1.453,33	- 2.537.382,82	3.244.017,04
3	LowTech	399,79	- 149,76	13.611,60	541,88	14.403,51	1.045.013,43	717.416,95	846,89	3.207.519,36	4.970.796,63
4	MediumTech	193,35	- 122,06	2.250,96	393,23	2.715,48	323.438,16	- 48.425,00	- 244,39	1.569.049,18	1.843.817,95
5	HighTech	85,94	- 79,06	37,73	149,79	194,40	56.906,16	26.551,17	- 354,19	646.696,43	729.799,56
Total	1989-1992	4.604,26	- 9.963,05	- 15.828,13	4.099,33	- 17.087,58	8.073.779,73	10.195.447,85	- 60.484,71	- 6.269.870,49	11.938.872,37
1	PrimaryProds	3.995,37	5.967,07	- 1.232,04	716,38	9.446,78	5.274.511,39	- 2.395.467,18	- 811,44	670.270,52	3.548.503,29
2	ResourceBased	3.860,92	- 69,73	1.573,08	31.681,51	37.045,77	5.742.793,31	60.229,67	2.032,86	5.092.379,20	10.897.435,04
3	LowTech	12.477,24	- 2.847,03	- 12.899,71	753,24	- 2.516,26	3.824.359,04	- 759.592,34	- 925,70	- 1.884.120,51	1.179.720,49
4	MediumTech	3.262,67	- 2.392,48	- 818,89	2.305,22	2.356,52	1.332.944,44	- 460.087,25	- 428,39	1.080.920,28	1.953.349,07
5	HighTech	789,93	- 136,72	- 797,56	1.200,51	1.056,15	432.728,53	187.546,80	263,58	1.277.051,76	1.897.590,67
Total	1992-1997	24.386,12	521,10	- 14.175,12	36.656,86	47.388,96	16.607.336,71	- 3.367.370,29	130,90	6.236.501,24	19.476.598,56
1	PrimaryProds	- 153,50	- 2.987,84	5.018,68	438,30	2.315,65	2.782.948,38	7.585.866,84	- 3.259,54	- 12.422.875,34	- 2.057.319,66
2	ResourceBased	- 423,48	1.226,67	- 9.228,09	946,59	- 7.478,31	4.395.420,43	8.581.930,01	- 6.604,22	- 19.306.495,06	- 6.335.748,84
3	LowTech	- 163,79	325,13	17.771,16	320,49	18.252,99	1.747.377,92	- 1.268.505,79	147,93	2.034.260,02	2.513.280,08
4	MediumTech	- 72,54	- 1.071,16	7.884,60	2.517,83	9.258,74	908.393,06	- 422.956,24	123,59	- 9.573,53	475.986,88
5	HighTech	- 22,35	430,60	812,93	96,30	1.317,49	540.159,27	371.441,96	1.391,48	- 287.352,31	625.640,41
Total	1997-1999	- 835,66	- 2.076,60	22.259,29	4.319,52	23.666,55	10.374.299,07	14.847.776,78	- 8.200,75	- 29.992.036,22	- 4.778.161,13
1	PrimaryProds	13.105,86	29.195,14	- 28.952,40	12.004,79	25.353,39	7.453.423,29	4.177.311,27	27.941,12	- 4.721.868,48	6.936.807,19
2	ResourceBased	25.998,76	8.393,11	- 6.766,02	50,53	27.676,38	9.898.584,00	3.524.660,76	9.544,49	- 6.384.379,71	7.048.409,53
3	LowTech	25.546,64	- 7.238,87	- 16.038,60	165,22	2.434,39	6.989.567,36	- 1.416.869,09	289,82	- 3.703.703,15	1.869.284,95
4	MediumTech	12.174,87	- 1.612,31	6.074,39	268,56	16.905,52	3.129.447,07	- 58.876,89	- 1.362,53	648.716,53	3.717.924,18
5	HighTech	2.626,39	- 636,91	1.775,85	2.583,48	6.348,82	2.068.828,24	- 1.056.052,67	- 198,36	2.332.045,57	3.344.622,79
Total	1999-2004	79.452,53	28.100,17	- 43.906,77	15.072,57	78.718,50	29.539.849,96	5.170.173,39	36.214,54	- 11.829.189,25	22.917.048,64
1	PrimaryProds	3.544,88	24.635,02	86.451,12	24.842,45	139.473,47	9.278.353,49	- 5.544,45	3.708.446,63	21.902.510,41
2	ResourceBased	5.177,99	- 5.985,91	- 2.980,55	371,41	- 3.417,06	10.843.248,94	6.998.498,03	- 6.976,44	- 4.314.350,64	13.520.419,89
3	LowTech	3.058,16	1.294,80	- 7.989,45	140,08	- 3.496,41	6.213.811,11	- 2.032.775,84	- 4.961,10	- 1.119.347,87	3.056.726,29
4	MediumTech	2.748,18	- 2.813,88	- 5.727,35	1.423,95	- 4.369,10	4.119.652,70	- 1.328.874,17	- 6.007,56	3.591.770,31	6.376.541,29
5	HighTech	814,34	3.237,98	28.798,44	1.248,81	34.099,57	3.135.128,26	- 787.511,63	197,72	- 2.276.488,57	71.325,78
Total	2004-2009	15.343,54	20.368,02	98.552,21	28.026,69	162.290,46	33.233.095,75	12.127.689,87	- 23.291,82	- 409.970,14	44.927.523,66
1	PrimaryProds	123.641,56	29.804,42	- 97.154,28	1.899,18	58.190,87	2.741.138,50	- 10.046.569,76	178.902,68	18.009.037,36	10.882.508,78
2	ResourceBased	40.430,41	- 7.400,25	3.500,15	4.330,75	40.861,06	2.458.334,09	- 2.453.584,98	12.845,72	27.526.991,66	27.544.586,49
3	LowTech	22.878,22	- 174,97	1.937,91	-	24.641,16	1.096.028,03	2.839.720,26	3.588,80	5.999.537,55	9.938.874,64
4	MediumTech	19.728,87	- 6.507,59	986,57	511,85	14.719,70	1.016.637,35	- 102.724,35	- 965,79	8.098.986,92	9.011.934,13
5	HighTech	29.796,78	- 15.799,53	- 20.454,43	-	- 6.457,18	454.934,00	365.573,92	9.186,11	1.318.604,48	2.148.298,52
Total	2009-2014	236.475,84	- 77,92	- 111.184,09	6.741,78	131.955,62	7.767.071,98	- 9.397.584,91	203.557,52	60.953.157,96	59.526.202,55
1	PrimaryProds	3.868,08	- 10.044,92	- 54.556,30	87,11	- 60.646,03	5.298.182,42	- 4.480.897,72	- 17.649,80	- 7.582.246,71	- 6.782.611,81
2	ResourceBased	1.615,41	2.020,89	691,22	3.321,78	7.649,29	6.563.596,04	- 7.871.253,15	1.384,84	- 6.712.654,39	- 8.018.926,66
3	LowTech	938,50	6.062,82	17.496,41	0,04	24.497,77	2.687.743,14	- 3.563.097,87	400,42	4.175.274,04	3.300.319,73
4	MediumTech	704,47	3.085,83	- 4.833,16	352,84	- 6.861,67	2.471.964,35	- 871.610,93	- 2.792,47	2.059.587,06	3.657.148,01
5	HighTech	603,34	3.618,65	- 2.783,65	18,01	1.456,34	914.178,03	336.899,60	- 1.436,95	- 1.758.769,15	- 509.128,47
Total	2014-2019	7.729,79	- 1.428,38	- 43.985,49	3.779,77	- 33.904,31	17.935.663,98	- 16.449.960,07	- 20.093,95	- 9.818.809,16	- 8.353.199,21
1	PrimaryProds	33.136,53	44.057,01	99.462,58	- 0,00	176.656,12	15.183.834,70	30.563.286,58	- 19.492,97	- 25.553.565,92	20.174.062,40
2	ResourceBased	19.900,54	12.634,18	10.528,57	283,49	43.346,79	18.939.151,24	31.125.182,74	19.983,15	- 31.130.520,89	18.953.796,25
3	LowTech	15.247,95	6.680,18	2.580,04	807,44	25.315,61	9.966.279,08	1.186.999,25	1.032,08	- 2.058.140,36	9.956.170,05
4	MediumTech	6.803,95	6.127,11	7.266,15	1.074,72	21.271,94	9.374.950,18	- 54.226,69	2.876,06	3.799.368,98	13.122.968,52
5	HighTech	7.175,17	3.906,14	- 6.459,85	-	4.621,46	2.841.921,31	1.253.069,68	7.455,67	- 1.609.980,88	2.492.465,78
Total	2019-2021	82.264,14	73.404,62	113.377,50	2.165,66	271.211,92	56.306.136,51	64.074.311,56	11.854,00	- 56.552.839,08	63.839.463,00

Source: Own computation

Based on CMSA computation, there is a substantial shift in competitiveness between product categories. Resource-based product export competitiveness was the most significant contributor to overall competitiveness before the Asia Economic Crisis. However, some manufacturing products started to contribute more to overall competitiveness, except from 2014 to 2019. It is a good sign that Indonesia has built competitiveness in manufacturing products exported to New Zealand.

Conclusion

Indonesia has been integrating trade with its region and the rest of the world. The path of trade integration began with APTA and proliferated to bilateral arrangements later on. However, based on CMSA computation, there has been no significant change in competitiveness between 1989 and 2021. However, the conclusion is entirely drawn from the results of the CMSA methods, which mutually recognize its caveats. The result showed that the world growth effect dominated the fluctuation of export growth. Theoretically, when barriers are relieved, market access and exports will increase. Competitiveness remained unchanged because domestic reform did not accompany establishing a free trade agreement, so market openness did not endorse further structural change and created domestic competitiveness.

However, it is argued that even though competitiveness did not shift over time from 1989 to 2021, it remained positive overall. This is consistent with this study, which reconfirms that trade integration with a reciprocal approach will prevent a country from further economic crisis. Even when composition effect and market effect are not consistently contributing to growth during a crisis, competitiveness will prevent them from further dropping. The observation is mutually seen in all decomposition of Indonesian export growth to ASEAN and Dialog Partners markets.

The market effect tends to be negative for Indonesian export products during the financial crisis in dialog partners' markets. During the financial crisis, the confidence of importers in those countries suffering from the financial crisis is lower. Indonesia definitely suffered from a banking crisis in 1997 – 1999, which created a negative market effect during 1997 – 1999.

This paper recommends that Indonesia encourage further trade integration reform using trade agreements and unilateral reform, including providing a better venue for technological transfer and innovation. Building up internal competitiveness by using trade integration is imminent. Using the steps of Korea, Korea has managed to reform its economy by using unilateral export promotion policy and combining it with trade agreements to gain better market access and open up the economy.

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